

AUG 7 2003

EXPRESS MAIL LABEL NO. EV302232884US

PATENT APPLICATION  
Docket No. 11527.355

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of )  
Khemani et al. )  
Serial No. 10/087,718 ) Art Unit  
Confirmation No. 7476 ) 1711  
Filed: March 1, 2002 )  
For: BIODEGRADABLE FILMS AND SHEETS SUITABLE )  
FOR USE AS COATINGS, WRAPS AND PACKAGING )  
MATERIALS )  
Examiner: Umakant K. Rajguru )

DECLARATION OF PER JUST ANDERSEN, PH.D. UNDER 37 C.F.R. § 1.132

1. I, Per Just Andersen, Ph.D., do hereby declare as follows:
2. I am a citizen of the Kingdom of Denmark; that my residence and post office address is 947 Via Fruteria, Santa Barbara, California 93110; that I am Vice President of Research and Development at E. Khashoggi Industries, LLC; and that I am an expert in materials science.
3. I am the first named co-inventor of the technology disclosed and claimed in United States Patent No. 6,168,857 (the '857 patent) and therefore possess intimate knowledge about the compositions, processes and articles of manufacture disclosed therein.
4. I have reviewed the Office Action dated June 2, 2003 finally rejecting the claims of the above-identified application.

5. In particular, I have reviewed the specific grounds for finally rejecting the claims in the above-identified application in light of the '857 patent.

6. Among other things, I am familiar with the manner in which the '857 patent was characterized by the Office Action.

7. Contrary to what was asserted in the Office Action, the manufacturing process described in the '857 patent does not inherently involve the stretching of sheets or films made from the disclosed compositions and therefore does not inherently form sheets having "cavitation" as that term is defined in the above-identified application and recited in claim 1.

8. The type of cavitation described in the above-identified application and recited in claim 1 results from the sheets or films being stretched while the thermoplastic polymer or polymer blend that forms the binding matrix is in the form of a thermoplastic melt, which causes the molten polymer or polymer blend to pull away from the solid particles to yield said cavitation.

9. The '857 patent, in contrast, does not describe a process whereby the starch and auxiliary binder form a thermoplastic melt so as to yield a composition that can be processed like a thermoplastic polymer or polymer blend (*i.e.*, that is heated so as to form a thermoplastic melt that can be shaped and then cooled to cause it to become solidified in a desired shape).

10. The '857 patent instead describes a process wherein starch, an auxiliary binder, and optional components are mixed with water to form a moldable composition that is formed into a sheet using one or more forming rollers and then dried (*e.g.*, using one more heated rollers) to cause the starch and auxiliary binder to harden and form a solidified sheet.

11. Passing the moldable composition of the '857 patent between forming rollers, as well as optionally extruding the moldable composition through a die prior to passing the

extruded composition between the forming rollers, as described of the '857 patent, inherently causes the moldable composition to become compressed (*i.e.*, exerted a compressive force onto the composition).

12. Compressing the moldable composition of the '857 patent by passing it between rollers or extruding it through a die to form a sheet necessarily involves the exertion of a compressive force on the composition, which is the opposite of stretching, which necessarily involves exerting a tensile force onto a sheet or film.

13. Because I personally manufactured sheets according to the '857 patent without stretching them, let alone stretching them to form cavitation, it is my opinion, as one of skill in the art, that the assertion at page 2 of the Office Action that the sheets made according to the '857 patent are "invariably stretched in one or two directions" is false.

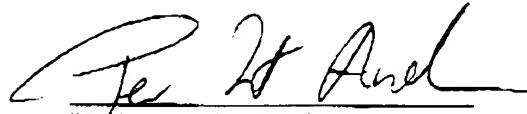
14. Finally, the starch within sheets manufactured according to the '857 patent is more crystalline, all things being equal, than starch within sheets or films that is first formed into a thermoplastic melt and then cooled to cause the molten starch to solidify.

15. Therefore, the starch-based sheets manufactured according to the '857 patent are inherently different than the sheets or films described in the above-identified application, which are manufactured from starches and/or other polymers that have been formed into a thermoplastic melt.

16. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon.

DATED this 20 day of August 2003.



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